25X1A ORIG: [redacted] mvp

UNIT: ASD/OSA

25X1A EXT: [redacted]

DATE: 9 MARCH 1965

CLASSIFIED MESSAGE

SECRET

ROUTING			
1	ASD/OSA	9	
2	ASD/OSA	10	
3	D/TECH/OSA	11	
4	AD/OSA	12	
5	D/FA/OSA	13	
6	OXC/OSA	14	
7	RB/OSA	15	
8		16	

PRECEDENCE				INITIALS
		DEFERRED	PRIORITY	
	X	ROUTINE	OPERATIONAL IMMEDIATE	INITIALS

25X1A TO: [redacted]

FROM: DIRECTOR

CONF:

INFO:

ROUTING [illegible]

OSA/-15

0760

25X1A 25X1A

25X1A TO [redacted] INFO [redacted] CITE [redacted]

MF

25X1A OXCART [redacted]

25X1A REF: [redacted] (IN 75659)

25X1A

MAXIMUM MEASURED GROUND OVERPRESSURES FROM A-12 AT 65,000 FEET DO NOT EXCEED ONE POUND PER SQUARE FOOT. THIS IS EQUIVALENT TO CLOSE RANGE THUNDER AND POSSIBLY SOME WINDOW DAMAGE. INCREASED ALTITUDES REDUCE OVERPRESSURES AND CORRESPONDING EFFECTS. NO PROBLEMS ANTICIPATED DUE TO SONIC BOOMS DURING OVERFLIGHTS OF DAMS ON TRAINING MISSIONS.

END OF MESSAGE

25X1A [redacted]

ASD/OSA

COORDINATING OFFICERS

SECRET

GROUP 1 Excluded from automatic downgrading and declassification

RELEASING OFFICER

AUTHENTICATING OFFICER

3

25X1A

HANDLE VIA [redacted]
CONTROL SYSTEM

SECRET
OXCART

[redacted]
Copy 4 of 4

25X1A

MEMORANDUM FOR: Deputy Director for Science and Technology

SUBJECT: Sonic Boom Measurements

1. Sonic boom measurements of OXCART aircraft are being recorded in the vicinity of [redacted] on an opportune, non-interference basis by Lockheed personnel using Lockheed ground measuring equipment. These measurements are being taken compatible with the current flight test and operational readiness program. Recent sonic boom overpressures recorded of SKYLARK aircraft in the SKYLARK environment, i.e., 2.8 Mach and 78,000 feet altitude, are 0.75 pounds per square foot nominal and a minimum of 0.3 pounds per square foot at direct overflight of the recording station. This nominal value is approximately double the volume theory but lower than the lowest overpressure recorded for the B-58 aircraft at comparable altitudes and lower speeds. During the climb-to portion of the flight profile at approximately 1.5 Mach and 30,000 feet altitude, overpressures as high as 4-5 pounds per square foot have been recorded. Lateral displacement of the flight path from directly over the recording station results in lower overpressures than those quoted above. Although the 2.8 Mach and 78,000 foot overpressures are comparatively small, this magnitude will definitely be heard on the ground. All of the above data have been transmitted to the FAA and NASA. (See Attachment)

25X1A

2. It is recommended that this Agency conduct no specific sonic boom measurements tests for the Supersonic Transport Program but continue to forward all results of A-12 overpressure recordings to the FAA/NASA for information. Future measurements will also include overpressures recorded during the deceleration phase of the flight profile.

JACK C. LEDFORD
Colonel USAF
Assistant Director
(Special Activities)

OXCART
SECRET

HANDLE VIA [redacted]
CONTROL SYSTEM

25X1A

Next 1 Page(s) In Document Exempt